I-405, Tukwila to Lynnwood Additional Lanes

10 Year-Funding in Full

Description:

•Adds two new lanes in each direction, with truck climbing lanes
•Adds new bus rapid transit system, HOV ramps, and park and ride lots throughout corridor
•Adds new and widens existing arterials

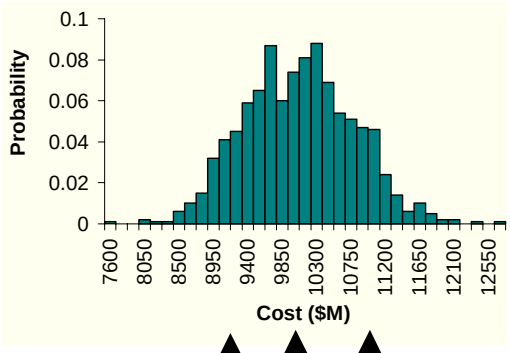
Schedule:

Begin Construction Range: 2005 - 2007

End Construction Range: 2013 - 2016

Inflation escalation is to 2010, approximate midpoint of construction

CEVP Result:



Project Cost Range

There is a 10% chance the cost is less than $ 9.1 Billion

There is a 50% chance the cost is less than $ 10.0 Billion

There is a 90% chance the cost is less than $ 10.9 Billion

Benefits this project would provide:

•Reduces vehicle travel by over 13 million hours per year
•Reduces congestion by 20% and accommodates additional 110,000 person trips per day in the corridor
•Decreases accidents through congestion reduction
•Improves quality and quantity of local and regional transit service, expanding current transit service by over 50%
•Adds 5,000 new park and ride spaces to the existing 9,500 spaces in the corridor
•Reduces the number of cars driven during rush hour through travel demand management strategies such as expanding the vanpool fleet by 1,700 vehicles and expanding employer commute trip reduction programs
•Improves environmental quality by reducing water pollution from stormwater and adding noise walls

Risk issues that could impact project cost or schedule:

•Limited number of contractors are qualified and available to pursue a project this large, increasing contract costs and project delays.
•Early stage of project development increases project scope uncertainty.
•Interchange design and freeway connections are complex and difficult to construct, which could increase time and cost.
•Changes to national seismic design criteria increase structure costs.
•Legal challenges and delays in obtaining environmental permits result in project delay.
•Extended time may be needed to negotiate and relocate utilities.
•Delays may occur from cities and counties on project scope components may occur.

Level of Project Design: Low | Medium | High

June 3, 2002

Washington State Department of Transportation

I-405, Tukwila to Lynnwood Additional Lanes

Option B – Completes SR 167 Interchange Area with Bellevue and Kirkland Improvements

10 Year Funding in Part

Description:

•Adds lanes on I-405 from SR 181 to SR 169 including rebuilding the SR 167 interchange
•Adds lanes to SR 167 from S 180th St to I-405
•Adds lanes to southbound I-405 from SE 8th to I-90
•Adds a lane northbound from Lake Wash Blvd. to I-90
•Adds a lane in each direction in the Totem Lake area

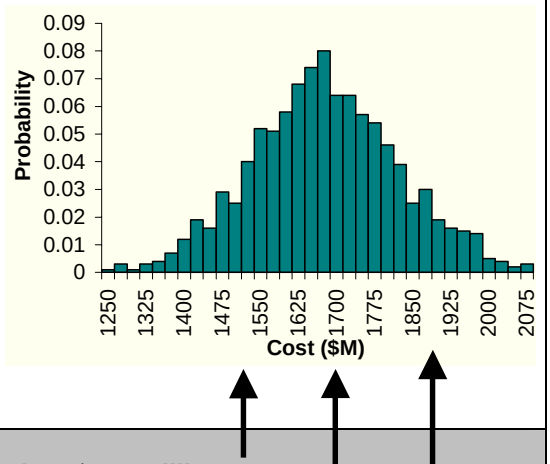
Schedule:

Begin Construction Range: 2005 - 2007

End Construction Range: 2011 - 2014

Inflation escalation is to 2009, approximate midpoint of construction

CEVP Result:



Project Cost Range

There is a 10% chance the cost is less than $ 1.5 Billion

There is a 50% chance the cost is less than $ 1.7 Billion

There is a 90% chance the cost is less than $ 1.9 Billion

Benefits this project would provide:

•Addresses most congested areas first in corridor in the areas of Renton, South Bellevue, and the Totem Lake area of Kirkland
•Provides improvements that can be connected to in follow-on projects
•Develops the preliminary engineering and environmental documents from Sea-Tac to Bothell to allow faster follow-on construction when funded
•Puts in place advanced environmental mitigation to allow for follow-on construction when funded

Risk issues that could impact project cost or schedule:

•Limited number of contractors are qualified and available to pursue a project this large, increasing contract costs and project delays.
•Delays in right-of-way purchase result in later construction start and project cost increases.
•Early stage of project development increases project scope uncertainty.
•Interchange design and freeway connections are complex and difficult to construct, which could increase time and cost.
•Changes to national seismic design criteria increase structure costs.
•Legal challenges and delays in obtaining environmental permits results in project delay.
•Extended time may be needed to negotiate and relocate utilities.
•Delays from cities and counties on project scope components may occur.

Level of Project Design: Low | Medium | High

June 3, 2002

Washington State Department of Transportation

I-405, Tukwila to Lynnwood Additional Lanes

Option A – Completes Sea-Tac Airport to Bellevue with Kirkland Improvements

10 Year-Funding in Part

Description:

- Adds up to two lanes in each direction from Sea-Tac Airport to Bellevue with truck climbing lanes
- Adds lanes to SR 167 from S 180th St to I-405
- Adds a lane each direction through Kirkland
- Implements bus rapid transit with transit centers and HOV direct access ramps from Lynnwood to Burien
- Builds new arterials
- Expands the vanpool program
- Requires future phasing at additional and higher costs

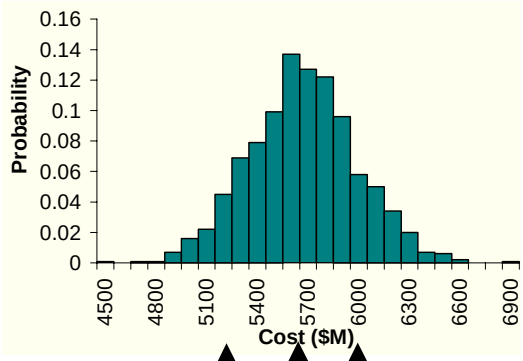
Schedule:

Begin Construction Range: 2005 - 2007

End Construction Range: 2013 - 2016

Inflation escalation is to 2010, approximate midpoint of construction

CEVP Result:



Project Cost Range

There is a 10% chance the cost is less than $ 5.2 Billion

There is a 50% chance the cost is less than $ 5.6 Billion

There is a 90% chance the cost is less than $ 6.0 Billion

Benefits this project would provide:

- Addresses most congested areas first
- Builds a complete segment from Sea-Tac International Airport to the new Bellevue Access ramps
- Provides incremental one lane addition each way in Kirkland from 70th Street to 128th Street with new interchange at 132nd
- Implements Bus Rapid Transit system from Lynnwood to Burien and Kent, along with expanded express bus service
- Constructs 4000 new park & ride stalls from Burien to Canyon Park
- Implements an aggressive transportation demand management program including over 1700 new vanpools
- Adds key arterial HOV and transit priority improvements
- Constructs new arterial connections on 132nd Street in Kirkland, and Willows Road from Redmond to Woodinville and Bothell

Risk issues that could impact project cost or schedule:

- Limited number of contractors are qualified and available to pursue a project this large, increasing contact costs and project delays.
- Right-of-way cost escalation will occur due to real estate market variations.
- Engineering is at a preliminary level, leading to many variables in the design of complex interchanges.
- Changes to national seismic design criteria increase structure costs.
- Challenges to early-action mitigation plan dealing with floodplain / habitat mitigation.
- Additional work scope to is needed to address connecting freeways.
- Extended time is needed to negotiate and relocate utilities.
- Delays are possible from cities and counties on project scope components.
- Legal challenges may be expected to environmental documents.

Level of Project Design:

Low — Medium — High

June 3, 2002

Washington State Department of Transportation